

## **WASTE FACILITY COVER DESIGN AND CHECK DATA REQUIREMENTS**

The following items must be addressed in the design folder for the waste facility cover:

### **Design Data Summary**

Important data is recorded and is consistent with the rest of the animal waste management system. This includes design calculations & documentation for:

- 1) Type of facility to be covered (storage pond, storage structure, anaerobic lagoon, or anaerobic digester- controlled temperature)
- 2) Type of cover (rigid, inflated, or floating)
- 3) Dimensions of cover
- 4) Cover support or floatation system
- 5) Anchorage system
- 6) Precipitation removal
- 7) Gas collection and removal
- 8) Access to storage or treatment facility under the cover
- 9) Safety items

### **Operation & Maintenance Plan**

A written site specific O&M Plan, including:

- 1) Instructions for maintaining support or floatation of the cover, as applicable.
- 2) Precipitation removal
- 3) Procedures and recommended frequency for checking cover and anchorage for leaks or other defects
- 4) Instructions for removing or opening and replacing the cover for operation and maintenance of storage or treatment facility
- 5) How to deal with excessive gas production
- 6) Safety precautions

### **Construction Specifications**

Enclose PATG Specification(s) 313S, 521A or others as applicable.

Include any "additional conditions" or items that are site specific or must be defined to supplement the standard specification. (See instructions for use of Specification 313S.)

Add any special or "by-others" specifications for all materials & equipment to be included in the cover, support or floatation system, anchorage, precipitation removal, and gas collection and removal.

### **Engineering Drawings**

#### **GENERAL**

On each drawing sheet, the title block should show the operator's name, type of operation, county and the persons involved in drawing, designing, and checking the storage facility.

Include any standard drawings made by NRCS or designed by others and concurred in by NRCS that are needed, and include them in the drawing index on the cover sheet.

Listed are items that should be included:

#### **PLAN VIEW SHEET(S)**

North arrow  
Bench mark(s)  
Scale  
Legend  
Existing structures  
Designed structures  
Future structures  
X-section locations  
Construction access  
Construction limits

#### **CROSS-SECTION SHEET(S)**

Two sections, minimum  
Scale(s)  
Loading structure/pipe  
Unloading structure/pipe  
Reference to detail drawings

#### DETAIL SHEET(S)

Cover

Anchorage

Cover removal or openings

Gas collection

Flare or utilization equipment

Water removal

Safety signs & fence

#### SEQUENCING STATEMENT WITH:

E&S control

Construction sequences

Special considerations

Equipment

Permits & agreements

Manure management

Vegetative requirements

Fencing and safety features

References to specific standards and drawings

Act 187 (1996) statement

#### **Erosion and Sediment Control Plan**

See DEP's Erosion and Sediment Pollution Control Program Manual or Conservation District guidance.

#### **Construction Check Data**

##### QUALITY ASSURANCE PLAN

A site-specific plan that addresses but is not limited to:

What specific items need inspection and when?

Who will do the actual inspection?

Is any testing equipment required for the inspection?

#### ONSITE VISITS

The QAP must include, at a minimum, as applicable to the specific job, onsite visits prior to:

- 1) Start of construction.
- 2) Installing cover.
- 3) Backfilling the anchor trench.
- 4) Completion of gas collection system.
- 5) Completion of water removal system.
- 6) Backfilling gas transfer pipe & water removal pipe.
- 7) Completion of the flare or gas utilization system.
- 8) Completion of all construction.

#### **Documentation**

A full set of as-built drawings, with construction certification signatures.

Check survey notes.

Documentation of cover seam tests and sealing of cover perimeter.

Material certifications, photographs, etc. as applicable.

Contractors' certifications of conformance.  
Engineer's certification of completion.